FIG. 1
RELATED ART

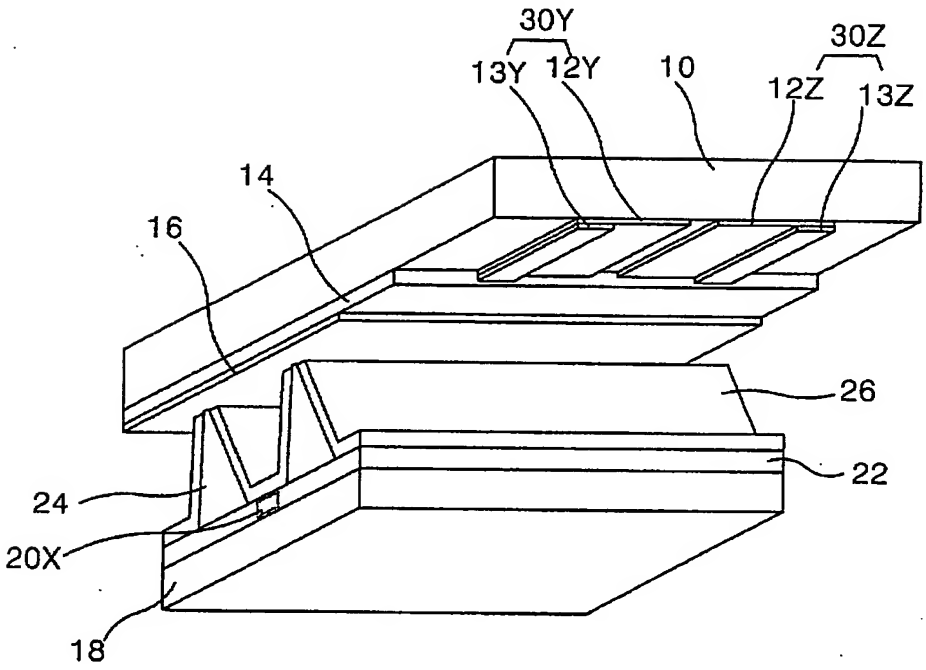


FIG.2
RELATED ART

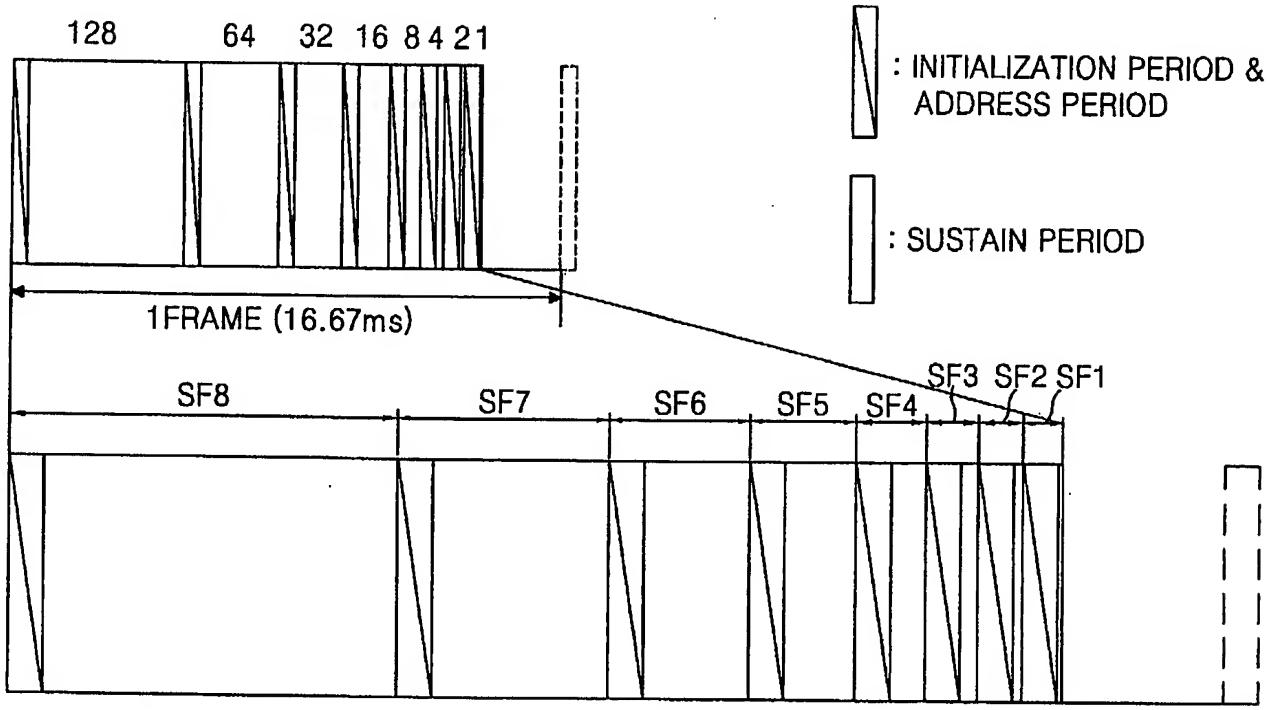


FIG.3
RELATED ART

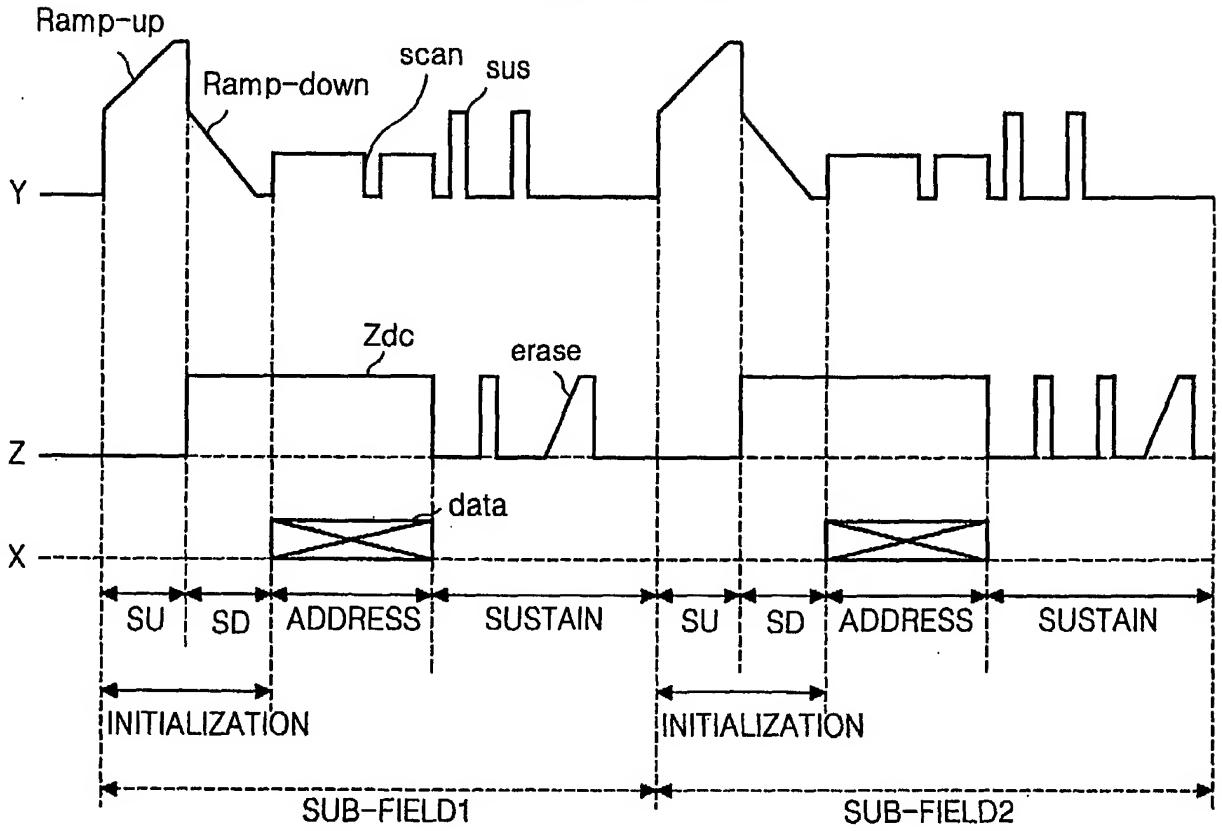
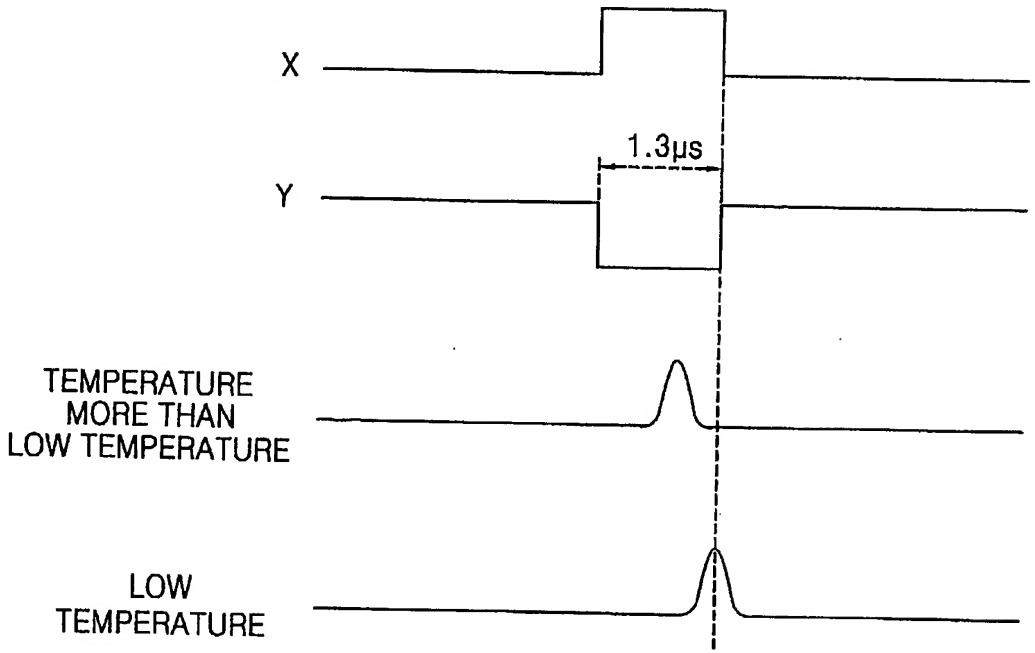


FIG. 4
RELATED ART



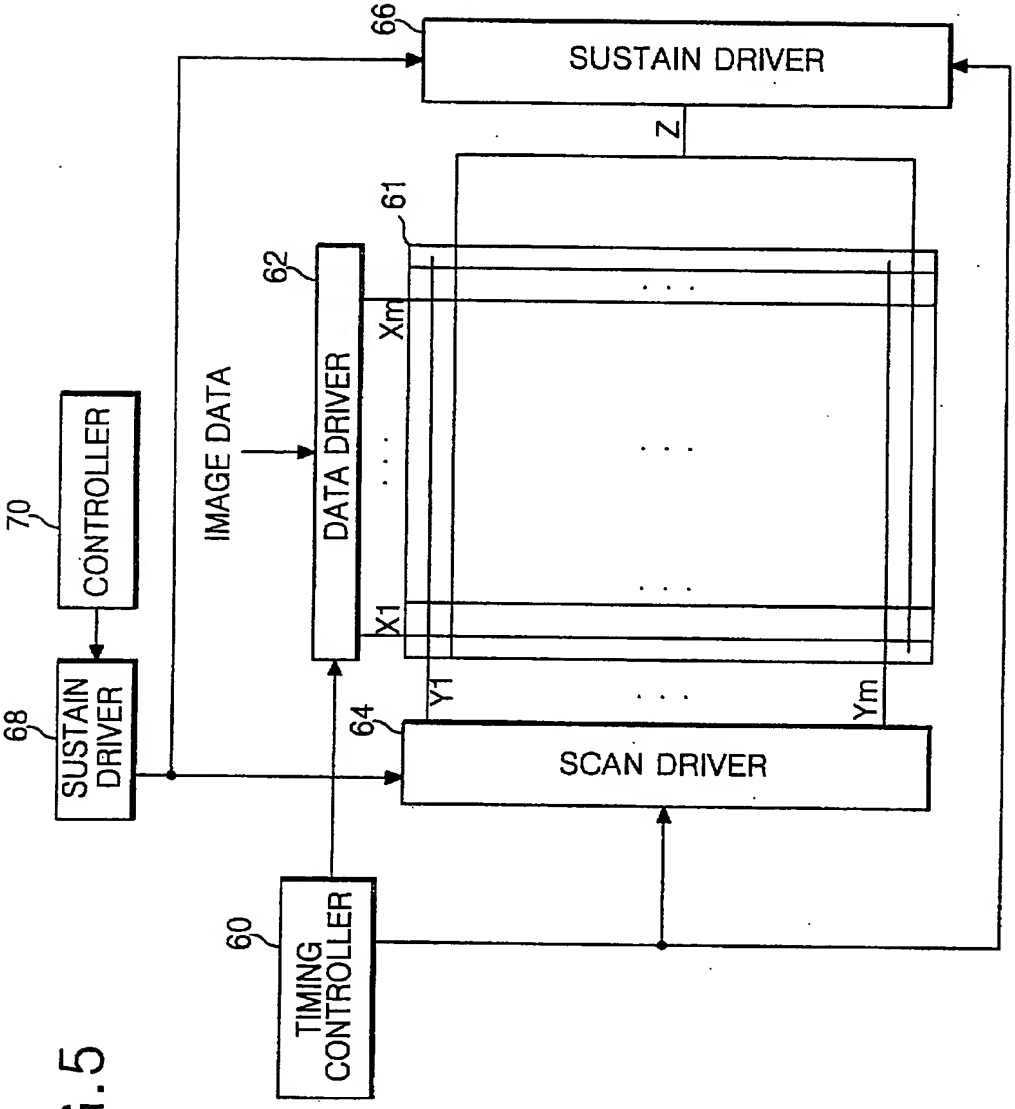

66
SUSTAIN DRIVER
Z
61
62
DATA DRIVER
Xm
X1
IMAGE DATA
70
CONTROLLER
68
SUSTAIN DRIVER
Y1
Ym
64
SCAN DRIVER
60
TIMING CONTROLLER

FIG.5

FIG.6

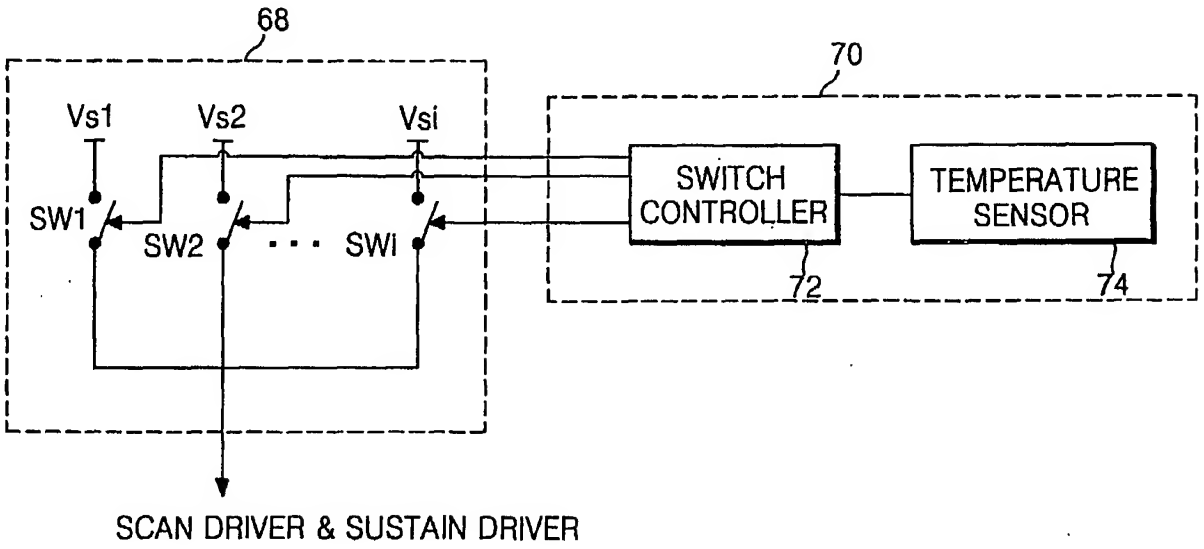

68
70
Vs1
Vs2
Vsi
SW1
SW2
SWi
SWITCH CONTROLLER
TEMPERATURE SENSOR
72
74
SCAN DRIVER & SUSTAIN DRIVER

FIG. 7

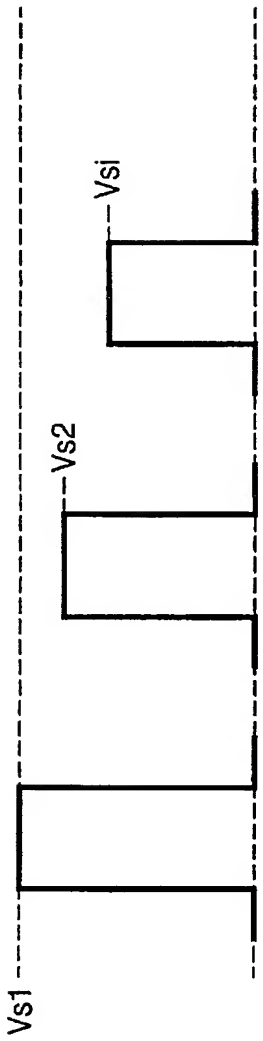


FIG.8

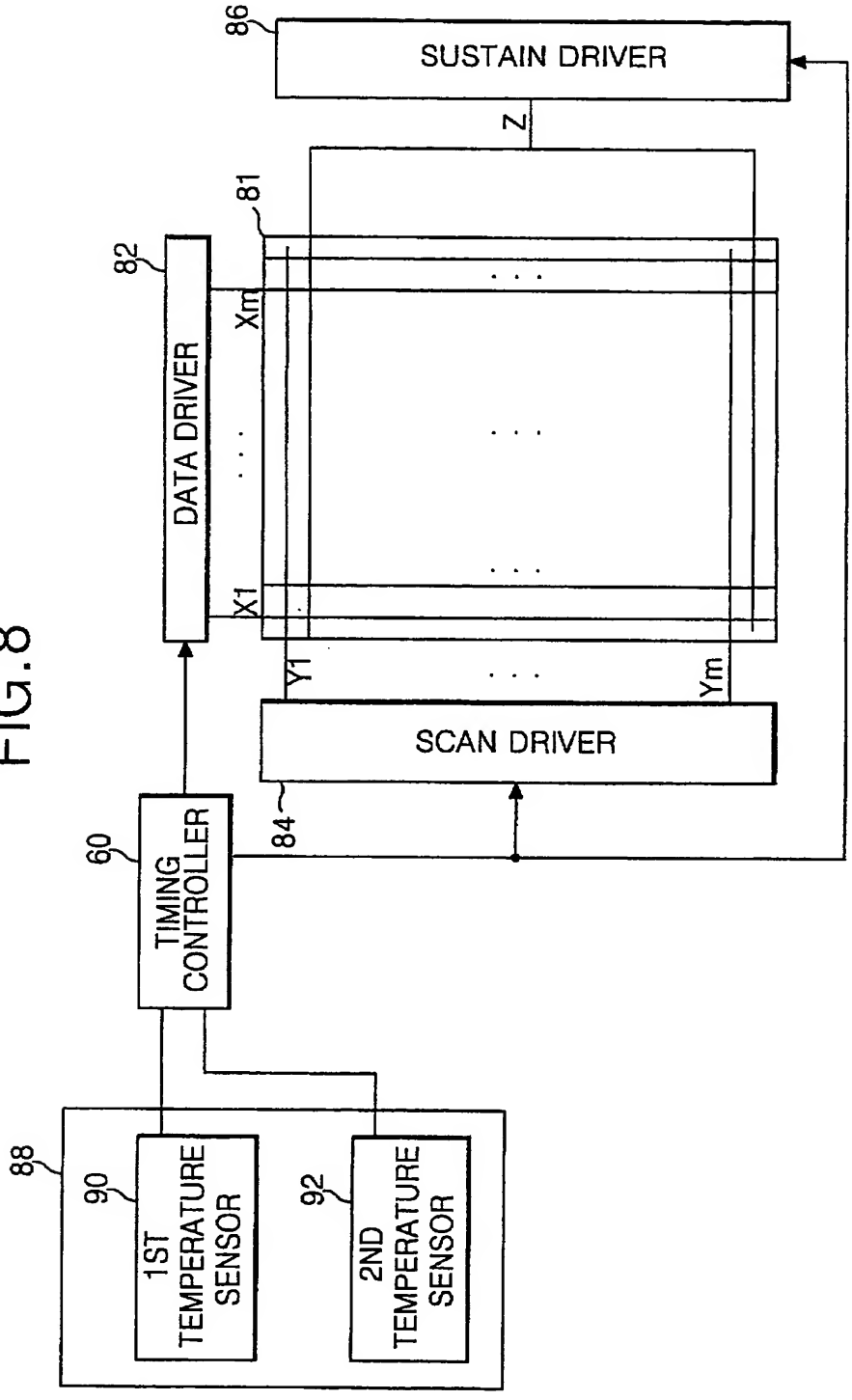

86
SUSTAIN DRIVER
Z
81
82
DATA DRIVER
Xm
X1
Y1
Ym
SCAN DRIVER
84
60
TIMING CONTROLLER
88
90
1ST TEMPERATURE SENSOR
92
2ND TEMPERATURE SENSOR

FIG.9A

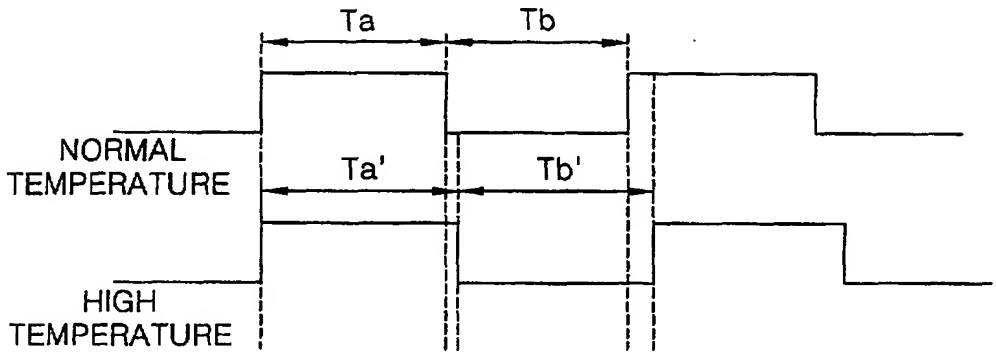


FIG.9B

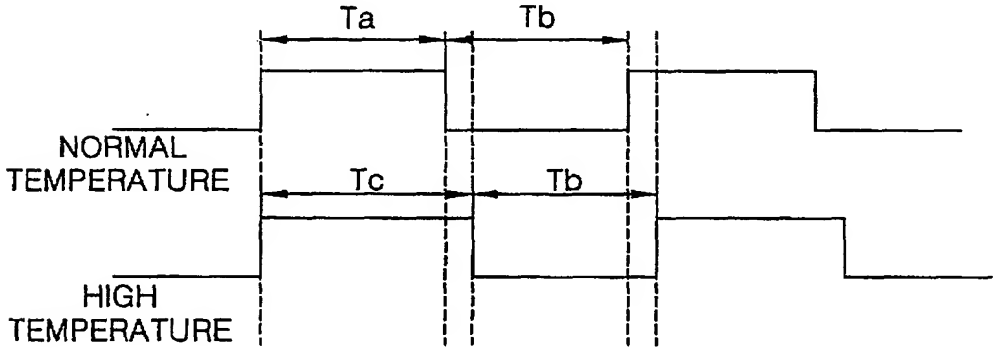


FIG.9C

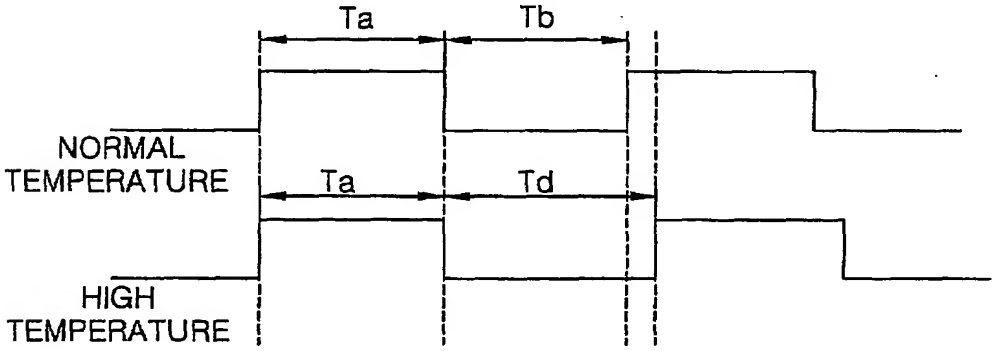


FIG.10

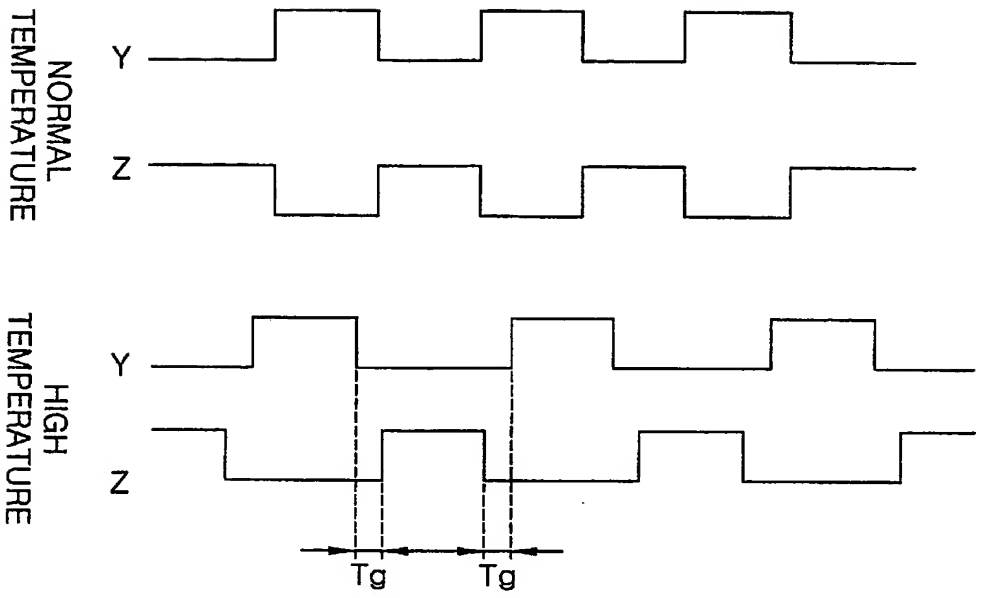


FIG.11A

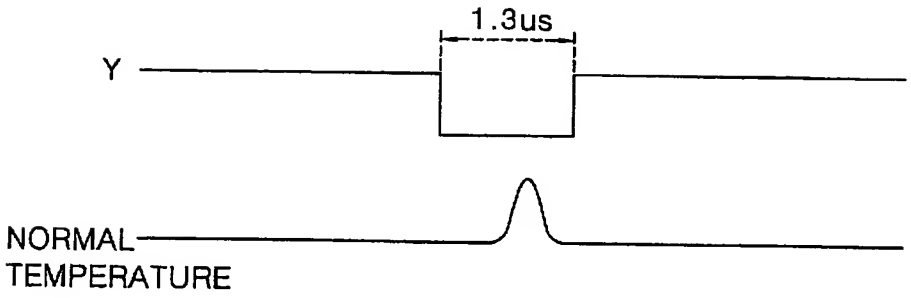


FIG.11B

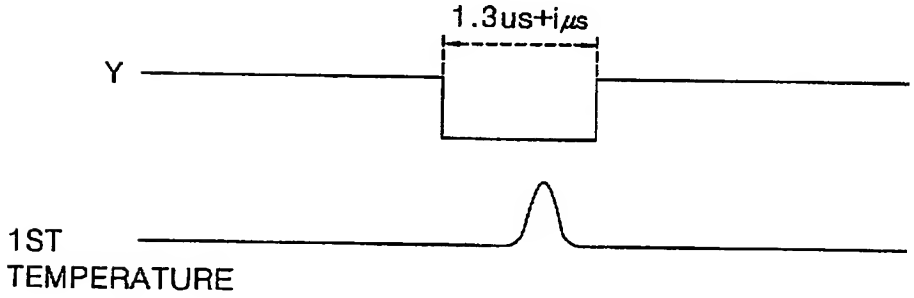


FIG.11C

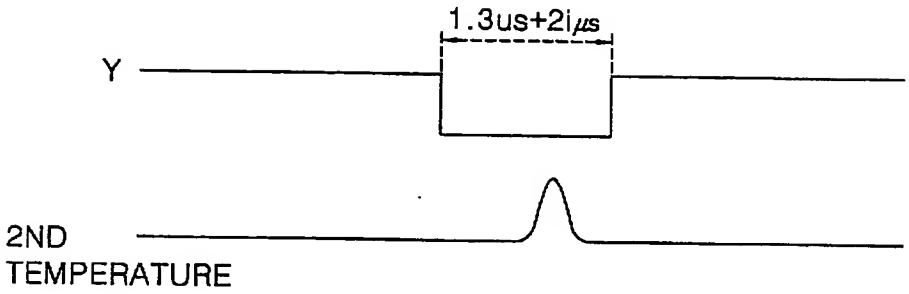
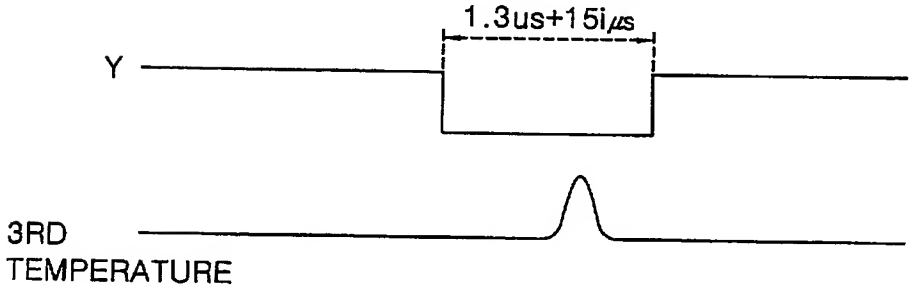



FIG.11D